ABSTRACT OF THE DISCLOSURE

Disclosed is a method for performing authorization of an ignition key by using an engine control unit (ECU) and an ignition key that stores a key ID, a lock password and a key password. The method comprises the steps of (1) the ECU receiving the key ID from the ignition key and determining if the key ID is a registered ID; (2) generating, if the key ID is a registered ID, a random number and encoding a stored lock password using the random number, and transmitting the random number and the encoded lock password to a transponder of the ignition key; (3) the transponder decoding the lock password using the received random number and encoded lock password, then determining if the decoded lock password is identical to a stored lock password; (4) the transponder encoding a key password using the stored key password, and transmitting the encoded key password to the ECU; (5) the ECU decoding the received encoded key password, then determining if the decoded key password is identical to a stored key password; and (6) releasing an ignition lock state if the decoded key password is identical to the stored key password.